

Potential new tool against aggressive brain cancer

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Singapore: Researchers at the Northwestern Brain Tumor Institute (NBTI) are trying to understand if a vaccine made from patient's own blood cells may slow the growth of a type of brain tumor. The national glioblastoma clinical trial is studying the vaccine's effect on glioblastoma multiformes (GBM), the most common and aggressive type of primary brain tumor.

The trial is an example of a growing trend in cancer research that seeks to understand if vaccines can be used to turn a person's own immune system into a weapon against cancers by slowing the growth of tumors.

Dr James Chandler, principal investigator and co-director, NBTI, and surgical director of neuro-oncology at Northwestern Memorial Hospital, said that, "Glioblastomas are complicated to treat because they are aggressive, fast-growing tumors that are often resistant to standard treatment. In this trial, a vaccine is made using the person's own white blood cells, which we hope will have the power to stimulate an immune response to kill brain tumor cells."

The vaccine, called ICT-107, is created by collecting the participant's white blood cells through a process called apheresis, which separates the components in the blood. The white blood cells are then treated to recognize the tumor cells turning them into immune cells, which early research indicates may be able to recognize and attack the tumor cells. Patients receive the vaccine in addition to standard treatment.

The phase II trial will examine both safety and efficacy of the ICT-107 vaccine. Researchers seek to enroll approximately 225 participants nationally who are newly diagnosed with a GBM. To be considered for enrollment, a person must be 18 years or older and not have a recurrent disease or any other active malignancy or history of malignancy. They must have undergone

surgery to excise the GBM, but have not yet started chemotherapy or radiation.	